UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/715,437	11/16/2000	Lynn Watson	5087-21	5708

20575 7590 09/14/2007

MARGER JOHNSON & MCCOLLOM, P.C.
210 SW MORRISON STREET, SUITE 400
PORTLAND, OR 97204

EXAMINER	
STEVENS, THOMAS H	
ART UNIT	**PAPER NUMBER**
2121	

MAIL DATE	DELIVERY MODE
09/14/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/715,437	WATSON ET AL.	
	Examiner	Art Unit	
	Thomas H. Stevens	2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 July 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7 and 10-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7,10-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-7,10-17 were examined.

Section I: Final Rejection

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1,7,10-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Devine et al., (US Patent 6,397,242; hereafter Devine). Devine teaches a virtual machine monitor (abstract).

Claim 1. An operating environment emulation system ("operating system emulators", column 3, line 17), comprising: a memory ("memory tracing", column 11, line 49) including: multiple emulators ("virtualizing computer systems", column 6, lines 53-62), wherein each emulator contains instructions to emulate a particular operating environment ("compatible with at least the Intel 80386"", column 6, lines 54-59) and a particular operating system ("x86"", column 6, lines 54-59) on a first computer; and a data file containing elements necessary to execute an emulated operating system operating on the first computer ("plurality of processing states", column 6, lines 58-60); and a connector, operable to allow the memory ("memory tracing", column 11, line 49) to be disconnected from the first computer (applicant has not defined what a first computer is; Office interprets the first computer as any x86 pc, column 6, lines 54-59) and to connect the memory ("memory tracing", column 11, line 49) to a host computer ("host operating system" part of host computer, column 24, lines 29-31) different from the first computer.

Claim 7. The system of claim 1, wherein the host computer ("host operating system" part of host computer, column 24, lines 29-31) is personal computer compatible ("compatibility across different machines" column 2, lines 65-67).

Claim 10. The system of claim 1, wherein the multiple emulators ("virtualizing computer systems", column 6, lines 53-62) further comprise emulators for different processors ("x86 Intel processors", column 8, line 35-43).

Claim 11. A method of establishing an emulated operating environment on a host computer ("host operating system" part of host computer, column 24, lines 29-31), the method comprising: transferring a data file containing necessary elements to emulate an operating system from a first computer (applicants have defined a first computer as a computer, although silent within the disclosure; Office interprets the first computer as any x86 pc, column 6, lines 54-59) having an operating system to be emulated to a memory ("memory tracing", column 11, line 49) device upon which reside multiple emulators ("virtualizing computer systems", column 6, lines 53-62) for multiple, different operating systems (e.g., Windows, NT, column 4, lines 1-3); disconnecting the memory ("memory tracing", column 11, line 49) device from the first computer (applicants have defined a first computer as a computer, although silent within the disclosure; Office interprets the first computer as any x86 pc, column 6, lines 54-59); connecting the memory ("memory tracing", column 11, line 49) device to a host computer ("host operating system" part of host computer, column 24, lines 29-31) different from the first

computer (applicants have defined a first computer as a computer, although silent within the disclosure; Office interprets the first computer as any x86 pc, column 6, lines 54-59) having an original operating system ("host operating system" part of host computer, column 24, lines 29-31) and a host processor ("host operating system" column 24, lines 29-31); using the original operating system ("host operating system" part of host computer, column 24, lines 29-31)and the host processor to load an emulator from the memory ("memory tracing", column 11, line 49) device to the host computer ("host operating system" part of host computer, column 24, lines 29-31) based upon the operating system to be emulated ("Operating System emulators" column 3, line 17); and executing the emulator to access the data file to establish an emulated operating environment on the host computer ("host operating system" part of host computer, column 24, lines 29-31) to operate on the data file.

Claim 12. The method of claim 11, wherein method further comprises receiving a user input designating the emulator to be loaded from the memory ("memory tracing", column 11, line 49) device.

Claim 13. The method of claim 11, wherein the method further comprises selecting an emulator automatically, wherein the selection is made by the host computer ("host operating system" part of host computer, column 24, lines 29-31).

Claim 14. The method of claim 11, wherein connecting the emulation system to the host computer ("host operating system" part of host computer, column 24, lines 29-31) further comprises connecting the emulation system to an accessory device (e.g. PDA, printer, well known).

Claim 15. A method of insulating an operating environment emulator from a host computer ("host operating system" part of host computer, column 24, lines 29-31), the method comprising: connecting an emulation device to a host computer ("host operating system" part of host computer, column 24, lines 29-31) having an original operating system and a host processor ("host operating system" column 24, lines 29-31); selecting an emulated operating system from multiple emulated operating systems available on the emulation device ("Operating system emulators", column 3, lines 17-27) wherein the emulated operating system is that of a first computer (applicants have defined a first computer as a computer, although silent within the disclosure; Office interprets the first computer as any x86 pc, column 6, lines 54-59) different from the host computer; executing the emulated operating system ("Operating system emulators", "Operating system application binary interface (ABI) to run on another operating system" column 3, lines 17-27) located on the emulation device on using the host processor of host computer ("host operating system" part of host computer, column 24, lines 29-31) having disabling host task management on the original operating system; routing input/output signals only through the emulated operating system(obvious since Unix applications are allowed to run on Window NT as depicted in column

3, lines 17-27); and activating an environmental shutdown by disabling the emulated operating system if necessary (user's ability to shut down the system by simply stopping the software execution, since user has the ability create there own virtual machine, column 1, lines 55-58) to prevent interactions between the original operating system and the emulated operating system.

Claim 16. The method of claim 15, wherein disabling further comprises completely isolating the host computer ("host operating system" part of host computer, column 24, lines 29-31).

Claim 17. The method of claim 15, wherein disabling further comprises allowing a user to define allowed interactions between (user's ability to allow the system to function is inherent since user has the ability create there own virtual machine, column 1, lines 55-58) the host computer ("host operating system" part of host computer, column 24, lines 29-31) and the emulation device.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Devine as applied to claim 1 above, and further in view of Bhagwat et al., (US Patent 6,721,805; hereafter Bhagwat).

Devine fails to teach IEEE- 802.11b to which Bhagwat teaches.

- Per claim 6 wireless link (802.11x includes 802.11b, column 5, line 13)

Therefore it would have been obvious to a person having ordinary skill in the art at the time of applicants' invention to modify Devine by way of Bhagwat since

Bhagwat allows shared communication medium capability to a plethora of computer devices (column 3, line 66 to column 4, line 1).

8. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Devine as applied to claim 1 above, and further in view of Braun et al., (US Patent 6,411,276; hereafter Braun).

Devine fails to teach Universal Serial Bus cable, IEEE-1394 to which Braun teaches.

- Per claim 2 Universal Serial Bus cable (column 4, line 65)
- Per claim 3. firewire cable (column 4, line 65)

Therefore it would have been obvious to a person having ordinary skill in the art at the time of applicants' invention to modify Devine to include a USB or IEEE-1394 cable as taught by Braun for the purpose of creating an interface between the host computer and the interfacing device (column 4, lines 61-66).

9. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Devine as applied to claim 1 above, and further in view of Dobbelstein (US Patent 5,881,269 hereafter Dobbelstein).

Devine fails to teach infrared and Ethernet cable to which Dobbelstein teaches.

- Per claim 4. infrared link (column 4, lines 38-39).

- Per claim 5. Ethernet cable (column 4, line 33)

Therefore it would have been obvious to a person having ordinary skill in the art at the time of applicants' invention to modify Devine by way of Dobbelstein since Dobbelstein teaches a method by emulating multiple users in a network environment by means of a multithread process in a client workstation (column 2, lines 5-8).

Section II: Final Rejection

Claim Objection

10. Applicants are thanked for addressing this issue. The objection is withdrawn.

102(e)

11. Applicants are thanked for addressing this issue; however applicants' response is non-persuasive in view of the prior art. Applicants state that the prior fails to teach "movement of a device from one computer (the first computer) to a second computer (the host computer) for which the device provides an emulator of the first computer to be executed on the host computer". The Office refutes this issue by the following excerpt from column 24, lines 41-51 in which the virtual operating system which communicates with a "real" or "physical" system hardware:

Assume that the virtual machine (VM) 120 is designed as a virtual Unix system and that the applications 720 in the VM are thus Unix-based

applications. ***The virtual machine 120 then will also include the virtual operating system (VOS) 700, which communicates with the "real," or "physical" system hardware 710 via the VMM 100. Note that many different types of applications may be run on the same physical machine, regardless of what the host operating system and hardware are. Each application is thus associated with its intended operating system, either the host operating system 700 (applications 720), or with a respective virtual operating system 170, associated in turn with a respective VMM 100.***

In this instance, the virtual computer (one computer or first computer) communicates with the host computer (real or physical hardware system or second computer).

The first and second computer limitations are not verbatim denoted in the specification. Applicants direct their definitions to page 4 of the disclosure to affirm the user loads the proper emulator on the home computer (host computer) from the computer used as work (the first computer); however, one can argue, based on the limited disclosure, that the terms can be interchangeable (i.e., host computer is the second computer and the work computer is the first computer) thus rendering the first and second computer limitations as indefinite. Same holds true for the second computer.

103(a)

12. Applicants are thanked for addressing this issue; however applicants' response is non-persuasive in view of the prior art. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how **the language** of the claims patentably distinguishes them from the references.

Conclusion

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicants' disclosure:

Goldberg et al., "The PRIM System: An Alternate Architecture for Emulator Development and Use" 1977 ACM pp.1-6.: teaches timeshare emulation system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mr. Tom Stevens whose telephone number is 571-272-3715, Monday-Friday (7:00 am- 4:30 pm EST).

If attempts to reach the examiner by telephone are unsuccessful, please contact examiner's supervisor Mr. Anthony Knight 571-272-3687. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov.. Answers to questions regarding access to the Private PAIR system, contact the Electronic Business Center (EBC) (toll-free (866-217-9197)).

Anthony Knight
Supervisory Patent Examiner
Tech Center 2100